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The Timeliness of Accounting Disclosures in International Security Markets

C. Mitchell Conover


University of Richmond, mconover@richmonde.edu

Robert E. Miller

Andrew Szakmary

University of Richmond, aszakmar@richmond.edu

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The Timeliness of Accounting Disclosures in International Security Markets

In this study, we examine financial reporting lags, the incidence of late filing, and the relationship between reporting lags, firm performance and the degree of capital market scrutiny. We use a large sample of firms spanning 22 countries over a eleven-year period. A focal point of our analysis is whether the incidence of late filing, and the relations between reporting days and other variables, differ systematically between common and code law countries. Relative to U.S. firms, we report that the time taken and allowed for filing is usually longer in other countries and that the statutory requirement is more frequently violated. Timely filing is found to be less frequent in code law countries. Poor firm performance and longer reporting lags are more strongly linked in common law countries. We also find that whereas greater capital market scrutiny and more timely filing are related, there is less support for a relationship between the level of debt financing and timely filing in code law countries.

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1. Introduction

In the United States, the U.S. Securities and Exchange Commission required public domestic corporations to file financial statements within 90 days of their fiscal year end.¹ Alford, Jones and Zmijewski [1994] (hereafter AJZ) examine the timeliness of accounting disclosures and report that firms who file beyond the filing requirement have poorer performance by both accounting measures and stock returns. The late filers have lower returns on equity, smaller growth in earnings per share, higher financial leverage, and lower internal liquidity for the fiscal year in which they file late. Market-adjusted stock returns are also lower during the fiscal year in which the firm files late. Furthermore, the authors find that market adjusted stock returns for late filers are lower in the post 90 day period, past the time when an investor would already be aware that a late filing firm was potentially facing financial difficulty. These returns are also lower the later a firm files past the regulatory requirement.

Numerous authors have suggested that the timeliness and value-relevance of financial reporting is strongly influenced by the fundamental nature of legal systems in different countries. In their characterization of accounting systems, Joos and Lang [1994] describe the Continental model, present in Germany, France, most of continental Europe and Japan, as one where public reporting is not emphasized. The focus of the Continental model has traditionally been on debtholders, due in part to the large debtholdings of banks. In contrast,

the Anglo-Saxon model, present in the U.K. and former colonies, focuses on equity holders and presenting a "true and fair view" of the firm's financial operations. Similarly, Ball, Kothari and Robin [2000] group countries into those with common law systems, where a shareholder governance model prevails and accounting practices are determined primarily in the private sector, and those with code law systems. The latter generally have a stakeholder governance model whereby major groups contracting with the firm (such as banks, debtholders and labor unions) are represented on corporate boards, and national governments establish and enforce accounting standards. Ball, Kothari and Robin hypothesize that there is less demand for public disclosure in code law countries because there is greater monitoring of the firm's operations by banks and other stakeholders with close relationships with the firm.

Other studies have highlighted the important distinctions between countries which closely correspond to the common vs. code law classification of Ball, Kothari and Robin [2000]. For example, La Porta, Lopez-de-Silanes, Shleifer and Vishny [1998] find that investor protection varies systematically by legal origin. Examining minority shareholder voting rights, they find that English common law countries provide the most protection to shareholders. In a related study, La Porta, Lopez-de-Silanes, Shleifer and Vishny [1997] find that countries with the weakest investor protection have the least developed capital markets and lower levels of equity financing. Finally, Ali and Hwang [2000] characterize country accounting standards in five ways: whether the financial system is bank oriented or market oriented; whether the accounting standards are set by public or private bodies; whether a Continental accounting model or British-American model is present; the influence of tax rules

on accounting standards; and the amount spent on external auditing services. These five factors are found to be highly interrelated. For example, the countries characterized as code law oriented in Ball et. al. are bank oriented with accounting standards set by governmental bodies. These Continental accounting model countries have high alignment between accounting and tax statements and spend relatively little on external auditing.

Virtually all previous research that examines the interaction between a country's legal system and the accounting practices of firms domiciled therein focuses on the value relevance of firms' financial statements. One common model for measuring value relevance is that of Basu [1997], in which the earnings yield is regressed on the contemporaneous return on the firm's common stock; the closer the slope coefficient is to the firm's cost of equity capital, the greater the value relevance of reported earnings. In Basu's model, differential impacts are also allowed depending on whether the stock return is positive or negative. Basu finds that bad news (as proxied by negative stock returns) is indeed generally reflected in reported earnings more quickly than good news, as evidenced by a higher slope coefficient between contemporaneous stock returns and earnings yields when stock returns are negative; he defines this property as conservatism. Ball, Kothari and Robin [2000] examine the relation between reported net income and fiscal year stock returns, in the context of Basu's [1997] model, for three code law countries (France, Germany and Japan) and four common law countries (Australia, Canada, U.K. and U.S.) from 1985 to 1995. They find that the relationship is stronger for common law countries than for code law countries and confirm this finding in subsets of tests with eighteen countries. In further tests, they show that the

stronger relationship is due to more timely recognition of losses (i.e. greater conservatism) in common law countries. Using a slightly different methodology, Ali and Hwang [2000] examine data for 16 countries and regress stock returns against earnings and book value of equity as a measure of the value relevance of accounting statements. Ali and Hwang find that the value relevance of accounting statements in countries with code law characteristics is low.

Recent studies have questioned the importance of the common vs. code law classification in explaining differences in the value relevance of earnings across countries. Giner and Rees [2001] and Raonic et al [2004] argue that the relation between reported earnings and stock returns is very similar across European countries, regardless of legal system classification. In contrast, Garcia Lara et al [2005] confirm the importance of a country's legal system: they argue that code-law based firms have incentives to reduce earnings consistently, enhancing the association between earnings and returns in bad news periods. They show that the differential earnings response to bad news in Germany and France (both code-law countries) decreases significantly. Similarly, Leuz et. al. (2003) find that earnings management varies by code and common law classification.

Other recent studies argue that the adoption of International Financial Reporting Standards (IFRS) in January 2005 will influence the reporting practices of European Union firms [see Ormrod and Taylor (2004)]. Hung and Subramanyam (forthcoming) examine German firms that adopted shareholder-oriented, fair-value based International Accounting Standards. They find that the firms' reported earnings are more volatile, relative to those firms that used traditional German standards designed to satisfy the needs of banks, the government,

and other stakeholders. However, Tendeloo and Vanstraelen (2005) examine IFRS adopting and non-IFRS adopting German firms and find no difference in earnings management practices.

The main purpose of our study is to extend AJZ's analysis of the timeliness of accounting disclosures in the United States to other countries. Specifically, we examine reporting lags, and the relation between these reporting lags and accounting and stock market performance, for annual accounting statements in 22 countries over a eleven-year period. We collect the reporting requirements for these countries through contacts with foreign stock exchanges or regulatory authorities. We report the incidence of on-time vs. late filing by country, and we regress reporting days (the number of days elapsed from fiscal year end to the release of financial statements) on variables proxying for both firm performance and capital market scrutiny. A focal point of our analysis is whether reporting days, the incidence of late filing, and the relations between reporting days and other variables, differ systematically between common and code law countries.

The contribution of our study is threefold. First, no published study has, to our knowledge, examined whether the descriptive and performance-related characteristics associated with late filers in the U.S., as documented by AJZ, exist in foreign countries. Second, though Frost and Kinney [1996] document less timely filing of statements by foreign issuers, their study focused on 156 firms listed in the U.S. during 1990. Similarly, though Bavishi [1995] reports on the relationship between profitability and time elapsed for the audit report for one year of data, he does not examine statutory requirement violations and other

performance measures. Our sample period covers eleven years, examines several performance measures, and uses firms with non-U.S. listings. Third, whereas the analysis of timeliness in Frost and Kinney is reported for foreign firms as a whole, our analysis examines this issue on a country by country basis and on a common versus code law basis. Thus, our study contributes to the literature on international accounting diversity, and the findings in this paper may have implications for the broader flow of international accounting research that examines the relations between reported earnings and stock returns.

The balance of this paper is organized as follows: In section 2 we provide a description of the data and present hypotheses to be tested. The timeliness of international filing is examined in Section 3, and relations between reporting days and firm-specific variables are explored in section 4. Section 5 concludes the paper.

2. Data and Hypotheses

Our primary data sources are Compustat's Global Vantage database and the I/B/E/S Historical Database – The International Edition, Analysts Estimates detail report. The Compustat database provides annual accounting data, monthly stock price and dividend data from 1986 to 1996. The I/B/E/S/ database provides analyst coverage of earnings projections and the release date of annual reports from 1986 to 1996. We merge the two databases to create our sample of firms that have annual statements for fiscal years 1986 to 1996 and subsequent performance measures. Our time period of data is closely aligned with that of Ali and Hwang [2000], who use data from 1986-1995, and Ball et al. [2000] who use data from

1985-1995.² The countries included in our study are the U.S., Canada and the 20 industrialized countries that are components of the EAFE (Europe, Australasia and Far East) index. As is evident from Table 1, the sample size varies greatly by country: the total number of observations ranges from 58 for Finland to 12,363 for the U.S., with the majority of countries having between 100 and 800 observations.³

The main variable of interest in our study is the reporting lag, defined as the number of days elapsed between the end of a firm's fiscal year and the release of EPS data. The reporting lag is measured using report dates obtained from I/B/E/S. We formulate and test four hypotheses in our study. The first two hypotheses, which follow directly from the greater expected demand for timely disclosure in common law countries, as discussed in detail in Section 1, are as follows:

- H1: The reporting lag (the number of days between the end of a firm's fiscal year and the release of EPS data) is shorter in common law countries than in code law countries.
- H2: The incidence of late filing of annual reports is lower in common law countries than in code law countries.

If the relation between timely filing and performance in foreign countries is similar to that in the U.S., we would expect late filers to have generally poorer performance, e.g. lower return on equity, lower fiscal year stock returns and lower standardized unexpected earnings (SUEs). However, given the differences in accounting regime and legal environment, we expect that the relationship may differ from that in the U.S. and between common and code law countries. If firms in code law countries are monitored by banks and other closely related parties, then the timely filing of accounting statements would not be as important to investors

in these countries, because the related parties have prior access to substantive information. In this case, late filing would not necessarily indicate financial difficulty. In common law countries however, firms face increased pressure for disclosure from public shareholders and late filers would more likely be in financial difficulty. Hence, the relationship between timely filing and performance is expected to be weaker in code than in common law countries. These expectations are formalized in the following hypothesis:

H3: There is a negative relation between favorable performance and reporting lag. This relation is stronger in common law countries than in code law countries.

In both common and code law countries, we would expect those firms with greater public capital market scrutiny to report on a more timely basis, where capital market scrutiny is the degree to which firms are prominent and visible, prompting investors and the media to pay attention to developments within the firm, and the degree to which investors become motivated to monitor management actions. Thus, large firms with a greater need for capital and those firms with higher analyst following should file their statements on a more timely basis. In addition, we believe that in code law countries the total debt-to-assets ratio proxies for private capital monitoring: firms with higher debt ratios receive more financing by banks and will therefore face lesser demands for timely accounting disclosure from public shareholders. Thus, late filers in code law countries would more likely be those firms with higher levels of debt. This relationship for late filers in code law countries may be attributable to the financing arrangements in these countries. La Porta et. al. [1997] report that external debt markets are less developed in code law countries. Walter and Smith [2000] observe that

industrial firms in France, Germany and Italy underutilize bond markets due to their traditionally close relationship with banks. In bank-oriented economies, Berglof [1990] notes that in the absence of heavy regulation, banks can exert more control of the firms they finance. When banks provide debt financing and monitor firms closely in code law countries, there may be less demand for timely accounting information if the banks have access to accounting information prior to public dissemination.⁴ Thus we hypothesize as follows:

H4: There is an inverse relation between the degree of public capital market scrutiny and reporting lag in all countries. In code law countries, there is a positive relation between the debt-to-assets ratio and the reporting lag.

3. The Timeliness of International Filing

The median number of days between the fiscal year end and the filing of annual statements is presented for common and code law countries in Table 1.⁵ Given the greater reliance on external capital markets in common law countries, we would expect more timely filing of annual reports in common law countries. Looking at the entire 1986 – 1996 sample period, in common law countries, the median number of days to file ranges from 38 in the United States to 122 in Malaysia. In code law countries, Japanese firms file in the shortest amount of time, at 76 days, while Austrian firms take more than half a year at 186 days. In 10 of the 12 code law countries, the median number of days to file is greater than 125 days whereas none of the common law countries exhibit a 125 day lag.

At the bottom of Table 1, the equally-weighted means of country medians and standard deviations are presented. For common law countries, the mean days to report is 98.30 days and in code law countries it is 147.71 days. There is also more uniformity in

reporting times in common law countries, as measured by the lower standard deviation of days to file. To formally test whether median reporting days in common and code law countries are equal, we conduct both two tailed t-tests (assuming unequal variances) and nonparametric Wilcoxon Rank-Sum Tests [Mason and Lind, 1996, pp. 621-5] using the country medians. For the entire 1986-1996 sample period, the t-statistic resulting from the two-tailed t-test is -3.883, indicating that the mean reporting lag across common law countries is significantly shorter (at better than 1%) than the mean across code law countries. The z-statistic resulting from the Wilcoxon Rank-Sum Test, -3.300, is also significant at better than 1% and confirms that the reporting lag tends to be shorter in common law countries.

When we break our sample period into two subperiods, 1986-1991 and 1992-1996, we find that in both common and code law countries reporting lags are significantly shorter in the latter subperiod. Nevertheless, substantial differences remain between common and code law countries in both subperiods with reporting lags significantly shorter in common law countries. Overall, the results in Table 1 are consistent with our hypothesis H1 and with what we expect based on Ball et. al [2000] and La Porta et. al. [1997]. That is, given the more highly developed external capital markets and the greater emphasis on shareholder rights, firms in common law countries present their financial information on a more timely basis.⁶

To determine whether firms file on-time or late, we must first discern the statutory filing requirements in each country. Filing requirements abroad are often set by the exchange where the firm is listed, in contrast to the U.S. where the 1934 Securities and Exchange Act required filing with the SEC within 90 days of fiscal year end. To determine filing

requirements in the 21 foreign countries included in our study, we corresponded with and received responses from each of these countries' stock exchanges or regulatory authority. These exchanges are listed in the notes to Table 2. As we also note in Table 2, filing requirements in some countries have changed over time, and in Canada, requirements vary by province.

We define a firm as late if their report is filed beyond the time period dictated by commercial law or exchange regulation.⁷ Because the filing requirements vary by country, we classify firms as on time or late within each country. In some countries a firm can seek a filing extension under special circumstances. For example, in Italy the filing deadline is 30 days after the annual meeting which must be held within four months of fiscal year end but can be extended to six months under special circumstances. We classify firms that file beyond the normal time limit (five months for Italian firms) as late. Our final sample consists of 25,463 observations for 5,371 firms in 22 countries.

The statutory filing requirements and the timeliness of reporting for our sample of countries is shown in Table 2. The filing requirements for our sample period are provided in the body of Table 2 and current requirements, if different, are provided in the footnotes. 19 of the 21 foreign countries in our sample have filing requirements that extend beyond the 90 days required in the U.S. during our sample period. Only Japan and Australia have current filing requirements equal to the U.S. standard. The longest filing requirement is in Germany, where firms have eight months to file their statements. Examining the most recent filing requirements in common law countries, in only three of the ten countries is the requirement

longer than five months. In code law countries, nine of 12 have requirements of six months or more. Assuming the average filing month as 30.4 days, the mean filing requirement across the 10 common law countries was 163.9 in 1986 (the earliest year examined in our study) and 153.8 days in 1996 (the latest year). For code law countries, the corresponding averages were 186.9 and 179.3 days, respectively. Thus, the average filing requirement is less stringent in code law countries in both the earliest and latest time period of our data.

Our results show that not only the filing requirements, but the incidence of late filing relative to these requirements, also varies greatly by country.⁸ In common law countries, for the entire 1986-1996 sample period, the incidence of late filing in our study ranges from 1.41% of reports filed late in Singapore to 17.26% late in the Netherlands. In code law countries, late filing ranges from 7.25% in Norway to a sizable 72.46% of annual reports filed late in Italy. Of the five countries with the lowest proportion of late filers, all are common law countries. For common law countries, the mean of country medians of percentage reports filed late is 7.78%, and the corresponding figure for the code law countries is 28.60%. Both the two-tailed t-test, and the nonparametric Wilcoxon Rank-Sum test, reject the hypothesis that the percentage of reports filed late in common and code law countries is the same, in favor of the alternate hypothesis (our H2) that the incidence of late filing is lower in common law countries. Moreover, as in the case of reporting days in Table 1, geographic distinctions by themselves are unlikely to account for the differences in late filing across countries, given that the mean incidence of late filing in the three European common law countries (10.08%) is substantially lower than the mean in the eleven European code law countries (28.40%)⁹ Also

note that in all countries except Singapore, the incidence of late filing is higher than the 1.65% in the U.S.

When we split our sample into the 1986-1991 and 1992-1996 subperiods, we find that in both periods the percentage of annual reports filed late in common law countries remains significantly smaller (at the 1% level, using both parametric and nonparametric tests) than in code law countries. Our results in Table 2 also appear to show that the incidence of late filing, in both common and code law countries, has declined in the latter period relative to the earlier one; however, statistical tests generally indicate that these declines are not significant.¹⁰ In summary, the longer reporting lags and higher proportion of late filers in code law countries are consistent with our hypotheses H1 and H2, with La Porta et. al. [1998], who find that English common law provides the greatest protection to investors, and with Joos and Lang [1994], who find that the Anglo-Saxon accounting model places the most emphasis on reporting to equity holders.

4. Relations between Reporting Days and Firm-Specific Variables

In the U.S., AJZ found that on-time filers are larger, with less financial leverage, higher return on equity, and higher liquidity than late filers. In this section, we examine if similar relations between timely reporting and these firm-specific characteristics exist in our sample. Our proxies for these characteristics are the return on equity (ROE), fiscal year stock return, standardized unexpected earnings (SUE), the number of analysts following each firm, market value of equity, and the total debt to assets ratio by country. These statistics are for the

fiscal filing year. The first three variables proxy for the performance of the firm: it is intuitively clear that these measures (ROE, fiscal year stock return, and SUE) should be positively related to performance.

The remaining three variables are used as proxies for capital market scrutiny. We believe that the number of analysts following a firm and the market value of a firm's equity will be positively related to the degree of pressure on a firm's management to file financial statements on a timely basis. Both of these variables are likely to be positively associated with institutional ownership of a firm's common stock, and institutional investors with more money at stake generally take a more active role in corporate governance. Frost and Pownall [1994] discover that mandatory and voluntary accounting disclosures are more frequent in the U.S. than in the U.K., perhaps due in part to greater pressure from U.S. analysts. They suggest that factors other than literal disclosure requirements affect the degree of disclosure. In the U.S., Kasznik and Lev [1995] suggest that disclosure practices are positively related to firm size and the degree of analysts coverage. In code law countries, the debt ratio may be negatively related to disclosure practices, because a firm that is being more closely monitored (privately) by creditors might be less pressured to release financial statements publicly in a timely manner. In code law countries, the debt markets for public companies are not as well developed and debt financing is frequently obtained through banks. If banks have prior knowledge of firms' financial health, we might expect that the relation between reporting days and debt-to-assets ratio to be directly related.

We market-adjust all the firm-level stock returns in the study by subtracting market index returns for the same time period.¹¹ Fiscal year stock returns are in local currency and are averages of monthly returns during the fiscal year in which a firm files its annual report.¹² We measure the market value of equity at fiscal year end and denominate it in U.S. dollar terms using the exchange rate at the time of the fiscal year end to facilitate across country comparisons. The number of analysts for each firm is measured as the number of analysts making fiscal year earnings forecasts. The debt ratio includes short and long term debt, and, consistent with Ali and Hwang [2000], the return on equity ratio uses net income exclusive of extraordinary charges. The SUE, a measure of earnings surprise, is actual earnings minus the mean analyst earnings forecast scaled by the standard deviation of the forecasts. We require that at least two analysts make projections before we calculate SUE. These forecasts are for the fiscal year end for which the firm files, and are the most recent forecast made by each analyst.

To test hypotheses H3 and H4, we report Pearson correlations between each of the six variables described above and reporting days in Table 3, where reporting days are defined as the number of days elapsed between the end of a firm's fiscal year and the release of financial statements. In addition to the six variables discussed above, we also report in Table 3 correlations of reporting days with stock returns during the filing period, and with stock returns during the first year immediately following the filing date because, for U.S. firms, AJZ find that market-adjusted stock returns are lower for late filers not only for the fiscal year for which they file, but also during the 90-day statutory filing period after the fiscal year end, and

in the year after the end of the statutory filing period. We examine correlations between reporting days and market-adjusted returns for our sample of foreign firms using the same timeline as AJZ, adjusting for filing periods of different lengths in other countries.¹³ In Finland for example, there are six months of filing period returns, and in Japan there are three months of filing period returns. The stock returns one year post the filing date would start in the seventh month after the fiscal year end in Finland and in the fourth month after the fiscal year end in Japan. As in the case of the fiscal year stock returns described previously, these returns are in local currency and are averages of monthly market-adjusted returns.

The main focus in Table 3 and subsequent tables is to determine if there are significant relations between the explanatory variables and reporting days, and to provide some descriptive indications of how these relations differ between common and code law countries. In Table 3, we examine the correlations between the measurement variables and reporting days for the 22 individual countries in our sample. Due to the heterogeneity of reporting practices, financing and legal traditions across all countries but also within both common and code law country classifications, we do not expect that all individual country results will be uniform regarding support for hypotheses H3 and H4. Thus, we also report the means of correlation coefficients across all countries, and across all common law and all code law countries. In Tables 4 and 5, we report the means of regression coefficients for groups of countries, in addition to the individual country coefficients.

In Table 3, we find support for hypothesis H3 as there are significant negative mean correlations between reporting days and the three performance measures in all countries and in

common law countries, with evidence of negative correlations in code law countries that is less strong. For ROE (column 2 of Table 3), all ten common law countries exhibit negative correlations with reporting days, with 9 out of 10 of these correlations significant. In the case of code law countries, 8 out of 12 countries show negative correlations but only two are significantly negative. The two-tailed t-tests in the bottom part of Table 3 reject the null hypothesis (at better than 1%) that the mean correlation of ROE and reporting days across all countries, and across common law countries, is zero; however, this hypothesis cannot be rejected for code law countries. We also report results for a sign test applied to all countries, common law countries and code law countries. The figures given are (two-tailed) binomial probabilities that the actual number of correlations of one sign observed across countries in a grouping, out of N countries in the group, would occur if positive and negative correlations were equally likely for each country.¹⁴ In the case of the ROE vs. reporting days correlations, again for all countries and common law (but not code law) countries, the sign tests handily reject the null hypothesis that the expected correlation is zero, in favor of the alternative that correlations tend to be negative more often than random chance would suggest.

Our conclusions regarding correlation between reporting days and fiscal year stock return are similar to those just described for ROE: timely reporting is more strongly related to performance in common law countries, as there are significant negative correlations (using both t-statistics and sign test), for all countries and all common law countries, but not in the case of code law countries as a whole. Furthermore, the frequency of correlations that are negative and significant for individual countries is higher in common law countries versus

code law countries. In the ten common law countries, all correlations are negative and six of them are significantly so. In code law countries, nine of twelve are negative and only one is significantly negative.

For standardized unexpected earnings (SUE), there is also evidence that performance and timely reporting are more strongly linked in common law countries as all ten individual country correlations are negative and six of the ten are significantly negative. In code law countries, ten of the twelve correlations are negative and only one of twelve code law countries have significantly negative correlations. Furthermore, although we observe a significant negative correlation with reporting days for all countries and in both common and code law countries as a whole, we reject the null hypothesis with greater confidence in common law countries when using both t-tests and sign tests.

In summary, the results of tests of correlations between timely reporting and performance measures in Table 3 generally support hypothesis H3, i.e. there is a negative relationship between timely reporting and performance in many countries and this relationship is stronger in common law countries. This result is consistent with there being greater pressure to file on a timely basis from public shareholders in common law countries and firms that file late are more likely to do so only when experiencing financial difficulties. In code law countries, the more typical providers of financing such as banks have prior access to financial statement information and the need for timely reporting is lessened. Hence the relationship between timely reporting and performance in code law countries is observed to be weaker.

We examine the relationships between returns in the two subperiods after the fiscal year end with that of reporting days in the last two columns of Table 3. It is clear from the results that whereas we do find significant correlations for a few individual countries, there is no systematic evidence across countries that correlations of reporting days with these variables differ from zero. Due to these findings, we do not examine these variables further in the study.

We next discuss the correlations between reporting days and our three proxies for capital market scrutiny. For number of analysts, the relationship between reporting days and the number of analysts is negative in eight of ten common law countries and eleven of twelve code law countries. The correlation is significantly negative in six common law countries and in seven code law countries. Both t-tests and sign tests show that the mean correlation is significantly negative for all countries and code law countries, but not for common law countries. Although there is heterogeneity in our sample of 22 countries, the evidence in many of the individual countries and for all countries and code law countries as a whole suggests that greater analyst following tends to result in more timely filing.

For market value of equity, the correlation with reporting days is negative for all ten common law countries and in eight the correlation is significantly different from zero. In code law countries, ten of the twelve are negative and six are statistically significant. Furthermore, the mean correlations are significantly negative for all countries, for all common law countries and for all code law countries, using both t-tests and sign tests. These results provide support for hypothesis H4 as in many countries the larger firms in need of greater public financing report their annual financial statements on a more timely basis.

For the debt-to-assets ratio, we find some limited support for hypothesis H4 as eight of twelve code law countries have a positive correlation between reporting days and the debt-to-assets ratio and four are significantly positive. Thus, in a limited number of code law countries where monitoring by banks is more frequent, firms with greater debt financing take longer to file their financial statements. However, the correlations in most countries are insignificant, and neither the t-tests nor the sign tests indicate that the mean correlation differs from zero in any overall country grouping.

The evidence in Table 3 in regards to hypothesis H4 generally supports the statement that firms with greater public capital market scrutiny file their financial statements on a more timely basis. In many countries, firms with greater analyst following and greater market value of equity file their financial statements on a more timely basis. However, the statement that firms in code law countries with greater debt-to-assets ratios will file their financial statements later is not as strongly supported. We next test hypotheses H3 and H4 using multivariate regressions.

Our regression results, in which the dependent variable is reporting days and the independent variables are firm performance measures and proxies for capital market scrutiny, are contained in Tables 4 and 5, respectively. The multiple regression independently estimated cross-sectionally for each country in Table 4 is

$$RD_{i,t} = \alpha + \beta_1 ROE_{i,t} + \beta_2 FRe_{i,t} + \beta_3 SUE_{i,t} + \varepsilon_{i,t} \quad , \quad (1)$$

where RD is reporting days, ROE is the return on equity, FRet is the market-adjusted fiscal year stock return, and SUE is standardized unexpected earnings. Table 5 contains results of regressions of reporting days against capital market scrutiny variables:

$$RD_{i,t} = \alpha + \beta_1 \text{NUMAN}_{i,t} + \beta_2 \text{MV}_{i,t} + \beta_3 \text{DA}_{i,t} + \varepsilon_{i,t} \quad , \quad (2)$$

where NUMAN is the number of analysts reported on I/B/E/S who made fiscal year earning projections for the firm, MV is the firm's market value of equity at fiscal year end, and DA is the firm's debt ratio for the fiscal year in which it files its report. Again, the regressions are estimated independently for each country. In both Tables 4 and 5, just as in Table 3, we report two tests of whether aggregations of coefficients across all countries, common law countries and code law countries differ significantly from zero. These are a two-tailed t-test for the mean of estimated coefficients across countries within each group, and a sign test based on binomial probabilities of observing the number of coefficients of the same sign that are actually observed in the regression results across countries.

Although the regression results reported in Tables 4 and 5 and the correlation results in Table 3 are related, the findings may differ because the correlations are univariate whereas the regressions are multivariate. For example, we find that the regression results in Table 4 and the correlation results in Table 3 are different for the SUE variable: in Table 4, four of ten common law countries have significant negative coefficients whereas in Table 3, six of the common law country correlations are significantly negative.

Despite these differences, the findings for ROE and SUE in Table 4 are very similar to those reported in Table 3: especially for ROE, we continue to find a reliable, statistically

significant negative relation in all countries and in common law countries (but not in code law countries) between these variables and reporting days. For the variable FRet, the mean of the regression coefficients using country groupings are not reliably significant, however there is a greater frequency of negative and significant regression coefficients in individual common law countries than there is in code law countries. All told, the results for the RD vs. ROE relation in Table 4 are strongly supportive of our hypothesis H3 and the common law findings are consistent with AJZ's results for the U.S.

The most notable aspect of the capital market scrutiny regression results reported in Table 5 is the strong negative relation between reporting days and the market value of equity, i.e. larger firms (as measured by market capitalization) tend to report sooner. For common law countries, for all 10 countries the coefficient on MV is negative, and it is significantly negative for eight. Aggregating across common law countries, both the t-test and the sign test handily reject the null hypothesis that there is no relation between MV and RD, in favor of the alternative that a negative relation exists. The evidence of a uniform negative relation between these variables is not as strong for code law countries: whereas nine of 12 β_2 coefficients are negative, two of the three that are positive are significant. Aggregating across the code law countries, the t-test indicates a significant negative relation on average (at the 5% level), but the sign test does not. When we aggregate all 22 countries without regard to their legal system, both the t-test and the sign test indicate a significant negative relation between RD and MV on average.

Evidence for the existence of relations between RD and the other capital market scrutiny variables is less convincing. For the number of analysts (NUMAN), the t-test (but not the sign test) indicates an aggregate negative relation for code law countries. There does not appear to be any significant relation between RD and NUMAN for common law countries as a whole, although five common law countries and seven code law coefficients are negative and significant.¹⁵ For the debt ratio, there is some evidence for an aggregate positive relation with RD in code law (but not common law) countries. For code law countries, ten of twelve coefficients on the debt variable are positive and six are significant. In addition, the coefficient over all code law countries is significant using both statistical tests.

The results in Table 5 support our hypothesis H4. There is a strong, robust aggregate negative relation between market value and reporting days; this finding is consistent with the first part of H4 which states that there is an inverse relation between the degree of capital market scrutiny and reporting lag. The second part of H4, which posits that firms with higher leverage in code law countries will have shorter reporting times is supported to a lesser degree.¹⁶

5. Conclusions

In this investigation of the filing timeliness of annual accounting statements in 22 countries over a eleven year period, we report that the time allowed for filing in other countries is usually longer than the 90 days required in the U.S., and (with the exception of Singapore) that the statutory requirement is more frequently violated. When we classify

countries by legal system using the same metric as Ball, Kothari and Robin [2000], a key finding of our study is that timely filing is less frequent in code law countries, as the mean number of days to file and the incidence of late filing are both significantly greater in code law countries than in common law countries. We also show that geographic distinctions, by themselves, do not explain differences in timeliness across countries, and that timeliness has generally increased during our sample period.

When we examine relations between reporting days (the number of days after fiscal year-end that a firm takes to report financial results) and firm-specific variables, two findings stand out. First, there is a highly significant and robust negative relation between return on equity and reporting days in common law countries; in contrast, there is no evidence of any uniformly or even predominantly negative relation between these variables in code law countries. If ROE can be interpreted as our most important proxy for firm performance, this result implies that late-filing firms tend to be poor performers in common law (but not in code law) countries. This finding, which to some degree extends those of Alford, Jones and Zmijewski [1994] for the U.S. to common law countries, is consistent with our hypothesis H3 and with numerous studies, e.g. Ball, Kothari and Robin [2000], La Porta, Lopez-de-Silanes, Shleifer and Vishny [1997, 1998], Ali and Hwang [2000], which suggest that firms do not have as great an incentive to report on a timely basis in code law countries. Due to these lesser incentives, we surmise that late filing in these countries is not significantly related to poor performance, because late filing in general is much more common and many firms that are good performers also file late.

A second noteworthy finding in our study is that among variables proxying for the degree of public capital market scrutiny that a firm is likely to face, market value of equity is most closely associated with filing timeliness. We find a highly significant negative relation between reporting days and market value of equity in most common law countries, i.e. firms with larger market capitalizations tend to file more quickly. Although there is some evidence of a negative relation in code law countries as well, the association between market capitalization and reporting days in these countries is less strong. Using univariate tests, we also report a significant, negative relation between analyst following and reporting days in many countries. There is limited support for the hypothesis that firms with greater financial leverage in code law countries file their financial reports on a less timely basis.

In summary, the results of our study support the contention of Joos and Lang [1994] and Ball, Kothari and Robin [2000] that a country's legal system strongly influences a firms' financial reporting. Our findings suggest that the common vs. code law distinction is key, and that further investigation of how earnings management practices distort the relation between reported earnings and stock returns, along the lines of Garcia Lara et al [2005] but using a broader set of countries, may prove fruitful. The availability of daily returns in these markets would also provide evidence as to whether the immediate market reaction to late filing varies by common and code law countries. Lastly, the use of other proxy variables for firm profitability, growth, size, and liquidity may yield additional insight into the relative differences between common and code law country firms.

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¹ The filing requirement in the U.S. decreased to 60 days for fiscal years ending on or after December 15, 2004. In the text to follow, we make reference to a 90 day requirement in the U.S. as that was the relevant requirement for our time period of data.

² As in Alford et. al. [1993], we restrict our sample to industrial firms (SIC codes 2000-3999 and 5000-5999) and eliminate firms that have changed their fiscal year. We limit our sample using two criteria employed by Ball et. al. as follows. To maintain consistency in the comparisons across all tables in the results to follow, we eliminate those observations with missing values for the independent variables in the regressions we estimate. We also exclude those observations in which our dependent variable, the reporting lag, is in the extreme two percentiles in each country. Additionally, we exclude foreign firms with listings on U.S. exchanges as these firms will face different disclosure incentives than non-U.S. listed firms, as documented by Huijgen and Lubberink [2005].

³ Because of the unbalanced nature of our sample, we examine statistical relations on a country-by-country basis, report medians of coefficients for common and code law countries, and conduct second stage tests with these country medians. Where appropriate to test our hypotheses, we examine if these medians are statistically significantly different from each other for common and code law countries. In other cases, we aggregate coefficients across countries and test whether their mean differs significantly from zero, and whether the number of observed coefficients of a given sign is consistent with the hypothesis that positive and negative coefficients are equally likely. These procedures weigh all countries equally in the analysis, and ensure that results for the three countries (the U.S., Japan and Great Britain) with an unusually large number of observations do not distort the results.

⁴ Alternatively, higher leverage for late filers in code law countries could be indicative of financial difficulty, as is the case for the U.S. firms of AJZ. This is unlikely though as the median ROE for late filers in code law countries is no lower than 2%.

⁵ We use the common/code law classifications of Mueller, Gernon and Meek [1994], page 9.

⁶ Some studies, e.g. Giner and Rees [2001] and Raonic et al [2004] have claimed that there are no substantive differences in earnings conservatism between common and code law countries in Europe. In contrast, with regards to the timeliness of accounting statements, we observe substantial differences in Table 1: median reporting days for all three common law European countries (i.e. Great Britain, Ireland and the Netherlands) are lower than for any of the eleven European code law countries.

⁷ In some countries, the exchange requirements differ from that of government authorities. For example, firms on the Irish Stock Exchange are required to submit their statements six months after fiscal year end. However, Ireland's Companies Registration Office requires firms to file their annual reports within nine months of fiscal year end. In these instances, we use the shorter time requirement in our analysis.

⁸ The incidence of late filing in our study for U.S. firms (1.65%) is lower than the 12.67% of U.S. firms (NYSE/ASE listings) reported in AJZ. The most likely reason is that AJZ examine an earlier period and that our sample is likely to be larger firms, due to the nature of our data sources.

⁹ As indicated previously, there is some ambiguity regarding the filing requirement for Italian firms. We reran the tests in Table 2 measuring late filing for Italian firms relative to a six month filing period. The conclusions drawn from statistical tests were unchanged.

¹⁰ For the common law countries, a paired sample t-test found no significant difference (at 5%) in the mean percentage of reports filed late, but a matched sample sign test did find that late filing percentages were significantly lower (at 5%) in the 1992-1996 period. For code law countries, neither test found a significant difference in the median late filing percentage across countries between the two subperiods. These results, not reported in Table 2, are available upon request.

¹¹ The following indices obtained from Global Vantage are used in the return calculations: All Ordinaries Index (Australia), Toronto Stock Exchange 300 Index, FT-UK Index, MSCI- Hong Kong Index, MSCI – Ireland Index, KLSE Composite Index, MSCI-Netherlands Index, MSCI – New Zealand Index, Straits-Times Index (Singapore), the S&P 500 Index, MSCI - Austria Index, MSCI – Belgium Index, Copenhagen Stock Exchange Index, MSCI-Finland Index, MSCI-France Index, MSCI- Germany Index, MSCI-Italy Index, MSCI-Japan Index, MSCI – Norway Index, MSCI – Spain Index, MSCI-Sweden Index, and MSCI-Switzerland Index.

¹² This methodology is not optimal, and our results for the relation between reporting days and adjusted fiscal year stock returns should therefore be interpreted with caution. Numerous studies, e.g. Dimson and Marsh (1986), Gruber (1996), and Carhart (1997) have shown that the inclusion of factors related to firm size, value/glamour, and momentum lead to more accurate performance measurement. Unfortunately, we are constrained to use the simple market adjustment mechanism due to lack of data on international factor returns over our 1986-1996 sample period. For example, we could not obtain a small-capitalization stock index of any kind from either Global Vantage, Morgan Stanley Capital International, or Datastream for 16 of the countries in our sample covering the entire 1986-1996 sample period.

¹³ Using daily stock returns for their U.S. firms, AJZ also delineate two subperiods in the post-statutory period. Our returns are monthly and do not facilitate subperiod analysis.

¹⁴ The cumulative binomial probability function for obtaining X-1 or fewer coefficients of a given sign in a sample of N countries is given by:

$$CP(X) = \sum_{X=0}^N \frac{N! P^X (1-P)^{N-X}}{X!(N-X)!}$$

where P is the probability of obtaining a coefficient of that sign (which we assume to be .50 under the null hypothesis that there is no relation between the explanatory variable and reporting days). Because we do not know, a-priori, if a preponderance of coefficients will be positive or negative, two-tailed probability values, calculated as $2[1 - CP(X)]$, are reported for the sign tests in Tables 3-5.

¹⁵ It is notable that the evidence for a significant aggregate negative relation between number of analysts and reporting days, in all countries combined and in the code law grouping, is much stronger in the univariate context of Table 3 than in the multivariate context of Table 5. We find that NUMAN and MV are positively correlated, and once one controls for the effects of MV, evidence of a significant relation between NUMAN and RD largely disappears. In individual country tests not reported, we find a correlation between MV and NUMAN that is as high as 0.74.

¹⁶ We also utilize a logistic regression for a subsample of the countries where the dependent variable equals one if the firm has filed late. Overall the regression results support the proposition that late filing is more performance related in common law countries than in code law countries. As in Table 4, the relationship between timely filing and performance variables is strongest for ROE in common law countries. No statistically significant relationship is found between ROE and the probability of filing late in code law countries. For capital market scrutiny variables, the logistic regression results differ from Table 5 in that the strongest relationship with timely filing is in common law countries for the number of analysts variable. However, there is some evidence, albeit weaker than in Table 5, that larger firms in common law countries and more highly levered firms in code law countries file on a more timely basis.

Table 1
 Statistics for Sample Size and Number of Days to File

<i>by Common and Code Law Classification</i>								
Sample Sizes <i>Number of Firms</i> <i>Number of Observations</i>		<i>Statistics for Days between Fiscal Year End and Release of EPS Data</i>						
		Entire Period		1986-1991		1992-1996		
		<i>Median</i>	<i>Standard Deviation</i>	<i>Median</i>	<i>Standard Deviation</i>	<i>Median</i>	<i>Standard Deviation</i>	
Common law countries								
Australia	157	606	94.0	35.7	115.0	35.7	80.0	28.5
Canada	233	749	54.0	34.1	54.0	40.0	54.0	32.7
Great Britain	669	2,369	111.0	37.5	127.0	34.7	103.0	35.4
Hong Kong	114	421	121.0	36.0	129.0	30.3	111.5	38.0
Ireland	25	78	117.5	38.1	137.0	26.9	107.5	38.9
Malaysia	136	408	122.0	43.1	135.0	41.8	111.0	40.5
Netherlands	80	336	102.0	44.1	99.0	34.8	104.0	50.6
New Zealand	27	106	119.5	49.6	164.5	50.8	87.5	40.2
Singapore	87	355	104.0	27.4	113.0	25.2	91.5	24.9
U.S.	2118	12,363	38.0	19.0	39.0	19.7	36.0	17.9
Code law countries								
Austria	34	136	186.0	43.8	195.0	40.4	179.0	47.3
Belgium	25	101	163.0	53.8	163.0	40.5	132.0	58.9
Denmark	36	96	125.0	49.7	170.0	41.9	109.0	45.3
Finland	26	58	153.0	55.3	163.0	33.7	117.5	66.1
France	171	586	135.0	45.0	154.0	31.0	116.0	53.7
Germany	144	584	180.5	43.2	189.0	35.4	172.0	50.3
Italy	56	167	169.0	39.7	169.0	35.7	169.0	44.3
Japan	1071	5,506	76.0	25.5	103.0	20.1	60.0	19.8
Norway	25	69	120.0	60.0	169.0	43.9	84.0	56.2
Spain	66	199	154.0	49.7	172.0	37.0	112.0	55.0
Sweden	37	84	151.0	61.1	163.5	45.0	94.5	59.2
Switzerland	34	86	160.0	58.3	192.0	44.6	125.0	64.0
Mean of all country medians:	244.1	1157.4	125.25	43.16	141.6	35.9	107.1	44.0
Mean of Common law country medians:	364.6	1779.1	98.30	36.45	111.3	34.0	88.6	34.8
Mean of Code law country medians:	143.8	639.3	147.71	48.75	166.9	37.4	122.5	51.7
T-test: Common law mean = Code law mean:			-3.883**		-3.984**		-2.565*	
Wilcoxon Rank-Sum Test: Common law median days = Code law median days:			-3.300**		-3.231**		-2.506*	

The statistics reflect data from the intersection of Global Vantage and International I/B/E/S databases for industrial firms for fiscal years ending 1986 to 1996. The means of common, code, and all country means are means of the ten common law country means, twelve code law country means, and 22 country means, respectively. The reported significance levels for the T-tests are for a two-tailed distribution and assume unequal variances. The Z-statistics reported for the Wilcoxon Rank-Sum Test also assume a two-tailed distribution. * and **, respectively, denote significance at the 5% and 1% levels.

Table 2
*Filing Requirements and Frequency of Late Reporting
 by Common and Code Law Classification*

	Filing Requirement during sample period	(On-time / Late) Percent Late		
		1986-1996	1986-1991	1992-1996
Common law countries				
Australia	6 months (1986-1994) 3 months (1995-1996)	568 / 38 6.27%	236 / 16 6.35%	332 / 22 6.21%
Canada	140 days ¹	727 / 22 2.94%	124 / 4 3.13%	603 / 18 2.90%
Great Britain	6 months	2244 / 125 5.28%	1198 / 82 6.41%	1046 / 43 3.95%
Hong Kong	6 months less 21 days (1986 – 1993) 5 months (1994 – 1996) ²	356 / 65 15.44%	138 / 41 22.91%	218 / 24 9.92%
Ireland	6 months ³	72 / 6 7.69%	20 / 2 9.09%	52 / 4 7.14%
Malaysia	6 months ⁴	373 / 35 8.58%	135 / 22 14.01%	238 / 13 5.18%
Netherlands	5 months	278 / 58 17.26%	132 / 21 13.73%	146 / 37 20.22%
New Zealand	6 months	94 / 12 11.32%	23 / 11 32.35%	71 / 1 1.39%
Singapore	6 months ⁵	350 / 5 1.41%	134 / 3 2.19%	216 / 2 0.92%
United States	90 days ⁶	12,159 / 204 1.65%	6735 / 139 2.02%	5424 / 65 1.18%
Code law countries				
Austria	6 months	66 / 70 51.47%	27 / 44 61.97%	39 / 26 40.00%
Belgium	7 months ⁷	83 / 18 17.82%	36 / 9 20.00%	47 / 9 16.07%
Denmark	7 months less 8 days (1986-1991) 5 months less 8 days (1992-1996)	70 / 26 27.08%	21 / 7 25.00%	49 / 19 27.94%
Finland	6 months	48 / 10 17.24%	25 / 9 26.47%	23 / 1 4.17%
France	6 months	473 / 113 19.28%	248 / 43 14.78%	225 / 70 23.73%
Germany	8 months	519 / 65 11.13%	283 / 23 7.52%	236 / 42 15.11%
Italy	5 months	46 / 121 72.46%	16 / 80 83.33%	30 / 41 57.75%
Japan	3 months	3811 / 1695 30.78%	765 / 1305 63.04%	3046 / 390 11.35%
Norway	7 months	64 / 5 7.25%	24 / 4 14.29%	40 / 1 2.44%
Spain	7 months (1986-1990) 6 months (1991-1996)	165 / 34 17.09%	91 / 11 10.78%	74 / 23 23.71%
Sweden	6 months	59 / 25 29.76%	28 / 14 33.33%	31 / 11 26.19%
Switzerland	6 months	50 / 36 41.86%	16 / 25 60.98%	34 / 11 24.44%

Table 2 (cont.)
*Filing Requirements and Frequency of Late Reporting
 by Common and Code Law Classification*

	1986-1996	1986-1991	1992-1996
Mean percent late in all countries	19.14%	24.26%	15.03%
Mean percent late in common law countries	7.78%	11.22%	5.78%
Mean percent late in code law countries	28.60%	35.12%	22.74%
T-test: Common law mean % late = Code law mean % late:	-3.667**	-2.998**	-3.531**
Wilcoxon Rank-Sum Test: Common law median % late = Code law median % late:	-3.297**	-2.835**	-2.967**

The reported significance levels for the T-tests are for a two-tailed distribution and assume unequal variances. The Z-statistics reported for the Wilcoxon Rank-Sum Test also assume a two-tailed distribution. * and **, respectively, denote significance at the 5% and 1% levels. The sources for the filing requirements in each country are: Australian Stock Exchange; Ontario Securities Commission; U.K. Financial Services Authority; Hong Kong Exchanges and Clearing Limited; Irish Stock Exchange; Securities Commission of Malaysia and Kuala Lumpur Stock Exchange; Euronext N.V. and the Netherlands Ministry of Finance; Institute Of Chartered Accountants of New Zealand; the Singapore Exchange; the Wienerbörse; Belgian Banking and Finance Commission; Danish Financial Supervisory Authority; Helsinki Stock Exchange; Euronext Paris; the Deutsche-Boerse; the Italian Commissione Nazionale per la Società e la Borsa; the Tokyo Stock Exchange; the Oslo Stock Exchange; the Spanish National Stock Market Commission; the Stockholmbörsen; and the Swiss Exchange.

¹ The firms in our paper are listed entirely on the Toronto Stock Exchange and the filing requirement in Ontario is 140 days. However, in Canada, filing requirements vary according to each province's regulations. For example, the current British Columbia Securities Commission filing requirement is 90 days.

² The current requirement (effective July 2000) is four months.

³ Until 1995, the Irish Stock Exchange was part of the London Stock Exchange and both exchanges shared the same listing rules.

⁴ Prior to 2001, firms were required to report their financial statements to the Kuala Lumpur Stock Exchange within 6 months of fiscal year end. In 2001, the Securities Commission of Malaysia instituted a four months requirement. Hence, the current requirement is four months.

⁵ The current requirement (effective July 2000) is five months.

⁶ The filing requirement in the U.S. decreases to 60 days for fiscal years ending on or after December 15, 2004.

⁷ Technically, the requirement is stated as 30 days after annual meeting, which must be held within 6 months of fiscal year end.

Table 3
Correlations between Explanatory Variables
and Reporting Days by Common and Code Law Classification

	<i>Return on Equity</i>	<i>Fiscal Year Stock Return</i>	SUE	<i>Number of Analysts</i>	<i>Market Value of Equity</i>	<i>Debt-to-Assets</i>	<i>Stock Return during Filing Period</i>	<i>Stock Return one year post filing date</i>
Common law countries								
Australia	-0.07	-0.20*	-0.12*	-0.04	-0.15*	0.01	0.07	0.05
Canada	-0.13*	-0.01	-0.09*	-0.26*	-0.30*	-0.05	0.01	-0.07
Great Britain	-0.07*	-0.16*	-0.10*	-0.05*	-0.19*	-0.04	-0.06*	-0.03
Hong Kong	-0.13*	-0.06	-0.06	-0.20*	-0.36*	0.03	-0.05	-0.01
Ireland	-0.22*	-0.36*	-0.29*	0.13	-0.03	-0.12	-0.10	0.02
Malaysia	-0.26*	-0.07	-0.03	-0.17*	-0.18*	0.05	-0.10*	0.00
Netherlands	-0.23*	-0.21*	-0.08	-0.22*	-0.20*	0.16*	-0.04	0.19*
New Zealand	-0.22*	0.11	-0.12	0.23*	-0.11	-0.08	0.17	0.24*
Singapore	-0.18*	-0.13*	-0.18*	-0.09	-0.33*	0.01	0.06	0.02
U.S.	-0.17*	-0.08*	-0.12*	-0.32*	-0.24*	0.01	-0.03*	-0.01
Code law countries								
Austria	-0.13	0.03	0.13	0.11	-0.08	0.01	-0.09	0.05
Belgium	0.23*	-0.08	-0.05	-0.50*	-0.30*	-0.08	-0.02	0.15
Denmark	-0.14	-0.14	-0.12	-0.07	-0.33*	0.15	0.06	0.18
Finland	-0.35*	0.24	-0.01	-0.27*	-0.23	0.36*	0.31*	0.06
France	0.06	-0.07	-0.03	-0.47*	-0.28*	-0.05	-0.07	0.00
Germany	-0.17*	-0.12*	-0.16*	-0.34*	-0.34*	0.06	-0.04	-0.02
Italy	0.07	-0.11	-0.10	-0.32*	0.05	-0.01	-0.02	-0.02
Japan	0.13*	0.16*	0.04*	-0.02	0.12*	0.12*	0.11*	0.10*
Norway	-0.21	-0.23	-0.09	-0.41*	-0.24*	0.33*	0.20	-0.26*
Spain	-0.11	-0.10	-0.13	-0.23*	-0.34*	-0.16*	0.03	-0.07
Sweden	-0.16	-0.16	-0.18	-0.05	-0.19	0.27*	0.12	0.04
Switzerland	-0.04	-0.11	-0.16	-0.02	-0.14	0.06	0.01	0.20
Mean of all country correlations								
	-0.1136	-0.0845	-0.0932	-0.1627	-0.1995	0.0473	0.0241	0.0368
t-statistic: mean = 0	-3.9227**	-2.9950**	-5.1258**	-3.9356**	-7.2282**	1.6162	1.0661	1.5548
Sign test: prob. value	0.0043**	0.0043**	0.0001**	0.0009**	0.0001**	0.2863	1.0000	0.2863
Mean of Common law country correlations								
	-0.1680	-0.1170	-0.1190	-0.0990	-0.2090	-0.0020	-0.0070	0.0400
t-statistic: mean = 0	-7.9729**	-2.9008*	-5.2024**	-1.8032	-6.4916**	-0.0815	-0.2593	1.2865
Sign test: prob. value	0.0020**	0.0215*	0.0020**	0.1094	0.0020**	0.7539	0.7539	0.7539
Mean of Code law country correlations								
	-0.0683	-0.0575	-0.0717	-0.2158	-0.1917	0.0883	0.0500	0.0342
t-statistic: mean = 0	-1.4490	-1.4683	-2.6947*	-3.7211**	-4.3424**	1.8636	1.4705	0.9468
Sign test: prob. value	0.3877	0.1460	0.0386*	0.0063**	0.0386*	0.3877	0.7744	0.3877

The means of common, code, and all country means are means of the ten common law country correlations, twelve code law country correlations, and 22 country correlations, respectively. The Pearson correlations are between the explanatory variables and number of days elapsed from fiscal year end to release of financial statements, where statistical significance at the 5% level using a two-tailed test is denoted *. The t-statistics in the bottom of the table are two-tailed and test the null hypothesis that the mean correlation across countries within a country grouping is zero. The sign test prob. values are (two-tailed) binomial probabilities that the actual number of correlations of one sign observed across countries in a grouping, out of N countries in the group, would occur if positive and negative correlations were equally likely for each country. For the t-tests and sign tests, * denotes significance at the 5% level and ** at the 1% level.

The return on equity ratio is for the fiscal year in which the firm files its annual report and uses net income exclusive of extraordinary charges. Fiscal year stock returns are averages of monthly returns during the fiscal year in which a firm files its annual report. Returns

are in local currency and market adjusted using local country indices. The Standardized Unexpected Earnings (SUE) is the actual earnings minus the mean analyst earnings forecast scaled by the standard deviation of the forecasts. We require that at least two analysts make projections before we calculate SUE. These forecasts are for the fiscal year in which the firm files its annual report and are the most recent forecast made by each analyst. The number of analysts are those reported on I/B/E/S who make projections for fiscal year earnings. The market value of equity is measured at fiscal year end and denominated in U.S. dollar terms using the exchange rate at the time of the fiscal year end. The debt to assets ratio is for the fiscal year in which the firm files its annual report and includes short and long term debt.

Table 4
Regressions of Reporting Days against Performance Indicator Variables

$$RD_{i,t} = \alpha + \beta_1 ROE_{i,t} + \beta_2 FRet_{i,t} + \beta_3 SUE_{i,t} + \varepsilon_{i,t}$$

	Number of observations	α	β_1	$T(\beta_1)$	β_2	$T(\beta_2)$	β_3	$T(\beta_3)$
Common law countries								
Australia	606	-66.16	-1.29	-0.38	-8.28**	-4.43	-8.43*	-2.25
Canada	749	-76.58	-9.33**	-3.07	1.12	0.64	-3.88	-1.44
Great Britain	2,369	-59.55	-3.96	-1.57	-5.83**	-6.71	-16.19**	-3.51
Hong Kong	421	-35.92	-8.85**	-2.60	-1.99	-0.99	-2.47	-0.86
Ireland	78	-57.45	-4.51	-0.84	-10.05*	-2.33	-9.92	-1.75
Malaysia	408	-53.17	-11.71**	-5.32	-1.15	-0.47	2.73	0.82
Netherlands	336	-37.81	-11.92**	-3.44	-7.31**	-2.72	-0.51	-0.14
New Zealand	106	-60.99	-14.48*	-2.18	8.55	1.56	-10.19	-1.07
Singapore	355	-75.00	-4.12*	-2.46	-2.19	-1.44	-11.72*	-2.50
U.S.	12,363	-48.91	-14.22**	-16.30	-1.00**	-3.73	-3.56**	-9.45
Code law countries								
Austria	136	-8.13	-6.84	-1.50	2.12	0.54	127.75	1.45
Belgium	101	-52.07	19.24**	2.73	-6.85	-1.29	-20.95	-1.00
Denmark	96	-32.40	-13.49	-1.27	-6.98	-1.32	-26.19	-1.40
Finland	58	-29.98	-38.44**	-3.33	15.92*	2.32	10.66	0.80
France	586	-37.29	8.02*	2.10	-4.25*	-2.01	-4.40	-0.72
Germany	584	-55.20	-13.79**	-2.89	-3.18	-1.68	-6.56**	-2.69
Italy	167	15.24	7.50	1.59	-3.77	-1.10	-6.46	-1.25
Japan	5,506	-11.91	7.76**	7.68	3.88**	10.41	0.95	0.86
Norway	69	-79.67	-19.20	-1.22	-11.11	-1.47	0.50	0.05
Spain	199	-33.26	-9.67	-1.11	-2.69	-0.72	-95.89	-1.56
Sweden	84	-34.79	-15.68	-0.75	-7.14	-1.03	-17.01	-1.05
Switzerland	86	-17.06	24.97	0.35	-4.24	-0.54	-14.73	-1.16
Mean (t-stat) of all country coefs.		-43.0936	-6.0914	(-2.1036)*	-2.5645	(-1.9388)	-5.2941	(-0.6867)
Sign test: prob. value				0.0169*		0.0169*		0.0169*
Mean (t-stat) of common law country coefs.		-57.1540	-8.4390	(-5.6759)**	-2.8130	(-1.6446)	-6.4140	(-3.4961)**
Sign test: prob. value				0.0020**		0.1094		0.0215*
Mean (t-stat) of code law country coefs.		-31.3767	-4.1350	(-0.7947)	-2.3575	(-1.1613)	-4.3608	(-0.3041)
Sign test: prob. value				0.4436		0.2701		0.7667

The means of common, code, and all country statistics (intercepts and regression coefficients) are means of the ten common law country statistics, twelve code law country statistics, and 22 country statistics, respectively. The regression regresses number of days elapsed from fiscal year end to release of financial statements (RD) against the return on equity (ROE), the market adjusted stock return during the firm's fiscal year (FRET), and the standardized unexpected earnings (SUE). Further information on the calculation of the explanatory variables is provided in the notes to Table 3. The t-statistics in the bottom of the table are for tests of the null hypothesis that the mean coefficient across countries in a grouping is zero. See the notes to Table 3 for an explanation of the sign test. * and **, respectively, denote statistical significance using two-tailed tests at 5% and 1%.

Table 5
 Regressions of Reporting Days against Capital Market Scrutiny Indicator Variables

$$RD_{i,t} = \alpha + \beta_1 \text{NUMAN}_{i,t} + \beta_2 \text{MV}_{i,t} + \beta_3 \text{DA}_{i,t} + \varepsilon_{i,t}$$

	Number of observations	α	β_1	$T(\beta_1)$	β_2	$T(\beta_2)$	β_3	$T(\beta_3)$
Common law countries								
Australia	606	-68.00	0.21	0.12	-11.83**	-3.64	1.16	0.70
Canada	749	-79.19	-5.38**	-4.00	-11.99**	-5.78	-1.09	-0.89
Great Britain	2,369	-61.03	2.37**	2.64	-16.58**	-9.64	-1.80*	-2.29
Hong Kong	421	-36.69	-4.43**	-2.71	-16.87**	-7.06	0.51	0.31
Ireland	78	-58.47	5.22	1.15	-1.23	-0.21	-4.81	-1.02
Malaysia	408	-54.93	-6.06**	-2.78	-15.89**	-3.02	2.35	1.12
Netherlands	336	-39.37	-7.90**	-2.92	-17.05*	-2.56	9.47**	4.02
New Zealand	106	-62.69	14.99**	3.04	-8.95	-1.65	-4.17	-0.81
Singapore	355	-76.44	-1.02	-0.73	-19.85**	-6.32	1.14	0.81
U.S.	12,363	-49.47	-5.57**	-25.00	-2.38**	-5.37	0.75**	4.49
Code law countries								
Austria	136	1.16	6.44	1.63	-6.72	-1.34	0.07	0.02
Belgium	101	-55.53	-26.26**	-4.60	-30.67	-0.76	4.05	0.77
Denmark	96	-34.42	11.70*	2.09	-46.33**	-4.21	8.79*	2.02
Finland	58	-31.94	-14.11*	-2.14	-14.57	-1.78	20.17**	3.11
France	586	-37.20	-22.26**	-10.10	0.92	0.30	-0.28	-0.17
Germany	584	-57.17	-11.55**	-6.35	-16.72**	-6.64	7.89**	4.45
Italy	167	17.99	-15.76**	-4.96	14.60*	2.53	0.93	0.31
Japan	5,506	-11.34	-1.99**	-4.92	7.92**	9.40	2.48**	6.81
Norway	69	-81.79	-26.10**	-3.40	-6.80	-0.74	25.22**	4.08
Spain	199	-42.26	-3.93	-1.05	-18.32**	-3.86	-6.30	-1.86
Sweden	84	-32.10	1.96	0.28	-11.85	-1.69	17.19*	2.51
Switzerland	86	-13.42	1.97	0.29	-9.76	-1.33	4.23	0.63
Mean (t-stat) of all country coefs.		-43.8318	-4.8845	(-2.0729)	-11.8600	(-4.4433)**	3.9977	(2.3378)*
Sign test: prob. value				0.2863		0.0009**		0.0525
Mean (t-stat) of common law country coefs.		-58.6280	-0.7570	(-0.3457)	-12.2620	(-6.0961)**	0.3510	(0.2791)
Sign test: prob. value				0.7539		0.0020*		0.7539
Mean (t-stat) of code law country coefs.		-31.5017	-8.3242	(-2.2411)*	-11.5250	(-2.4485)*	7.0367	(2.6028)*
Sign test: prob. value				0.3877		0.1460		0.0386*

The means of common, code, and all country statistics (intercepts and regression coefficients) are means of the ten common law country statistics, twelve code law country statistics, and 22 country statistics, respectively. The regression regresses number of days elapsed from fiscal year end to release of financial statements (RD) against the number of analysts providing earnings projections (NUMAN), the market value of equity at fiscal year end (MV), and the debt-to-assets ratio (DA). Further information on the calculation of the explanatory variables is provided in the notes to Table 3. The t-statistics in the bottom of the table are for tests of the null hypothesis that the mean coefficient across countries in a grouping is zero. See the notes to Table 3 for an explanation of the sign test. * and **, respectively, denote statistical significance using two-tailed tests at 5% and 1%.